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2221  GTAACCAAGCTGGTCAACGCACTGCGCCGTGAATTCGATCTGCCAGTGCACGTGCACACC 2280
      V T K L V T A L R R E F D L P V H V H T
2281  CACGACACTGCGGGTGGCCAGTTGGCTACCTTGTCTGCAGCTCAAGCTGGTGCAGAT 2340
      H D T A G G Q L A T Y F A A A Q A G A D
2341  GCTGTGACGGTGCTTCCGCACCACTGTCTGSCACCACCTCCCAGCCATCCCTGTCTGCC 2400
      A V D G A S A P L S G T T S Q P S L S A
2401  ATGTGTGCTGCATTCGCGCACACCCGTCGCGATACCGGTTTGAGCCTCGAGGCTGTTTCT 2460
      I V A A F A H T R R D T G L S L E A V S
2461  GACCTCGAGCCGTACTGGGAAGCTGTGCGCGGACTGTACCTGCCATTGTAGTCTGGAACC 2520
      D L E P Y W E A V R G L Y L P F E S G T
2521  CCAGGCCCAACCGTGCAGTCTACCGCCACGAAATCCCAGGCGGACAGTGTCCAACCTG 2580
      P G P T G R V Y R H E I P G G Q L S N L
2581  CGTGACACAGGCCACCGCACTGGGCCCTTGCTGATCGCTTCGAGCTCATCGAAGACAACATAC 2640
      R A Q A T A L G L A D R F E L I E D N Y
2641  GCAGCCGTTAATGAGATGCTGGGACGCCCAACCAAGGTCACCCCATCTCCCAAGGTTGTT 2700
      A A V N E M L G R P T K V T P S S K V V
2701  GGCGACCTCGCACTCCACCTGGTTGGTGGGGTGTAGATCCAGCAGACTTGTCTGCAGAC 2760
      G D L A L H L V G A G V D P A D F A A D
2761  CCACAAAAGTACGACATCCCAGACTCTGTTCATCGCGTTCCTGCGCGCGAGCTTGGTAAAC 2820
      P Q K Y D I P D S V I A F L R G E L G N
2821  CCTCCAGGTGGCTGGCCAGAACCAGTCTGCGCACCCGCGCACTGGAAGGCCGCTCCGAAGGC 2880
      P P G G W P E P L R T R A L E G R S E G
2881  AAGGCACCTCTGACGGAAGTTCTGAGGAAGAGCAGGCGCACCTCGACGCTGATGATGCC 2940
      K A P L T E V P E E E Q A H L D A D D S

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FIG. 1D

2941 AAGGAACGTCGCAACAGCCCTCAACCGCCTGCTGTTCCCGAAGCCAACCGAAGAGTTCCTC 3000
 K E R R N S L N R L L F P K P T E E F L
 3001 GAGCACCGTCGCGGCTTCGGCAACACCTCTGCGCTGGATGATCGTGAATCTCTACGGA 3060
 E H R R R F G N T S A L D D R E F F Y G
 3061 CTGGTCGAGGGCCGCGAGACTTGATCCGCTGCCAGATGTGCGCACCCCACTGCTGTGT 3120
 L V E G R E T L I R L P D V R T P L L V
 3121 CGCCTGGATGCGATCTCTGAGCCAGACGATAAGGGTATGCGCAATGTTGTGGCCAACGTC 3180
 R L D A I S E P D D K G M R N V V A N V
 3181 AACGGCCAGATCCGCCCAATGCGTGTGCGTGACCGCTCCGTTGAGTGTGTACCCGAACC 3240
 N G Q I R P M R V R D R S V E S V T A T
 3241 GCAGAAAAGGCAGATTCTCCAAACAAGGGCCATGTTGCTGCACCATTCGCTGGTGTGTGTC 3300
 A E K A D S S N K G H V A A P F A G V V
 3301 ACTGTGACTGTTGCTGAAGGTGATGAGGTCAAGGCTGGAGATGCAGTCGCAATCATCGAG 3360
 T V T V A E G D E V K A G D A V A I I E
 3361 GCTATGAAGATGGAAGCAACAATCACTGCTTCTGTTGACGGCAAGATTGAACGCGTTGTG 3420
 A M K M E A T I T A S V D G K I E R V V
 3421 GTTCCTGCTGCAACGAAGGTGGAAGGTGGCGACTTGATCGTCGTCGTTTCCTAA 3474
 V P A A T K V E G G D L I V V V S *

FIG. 1E

ATCC 21253	pyc	1		50
NRRL B-11474	pyc		MST HTSSTLPAPK KILVANRGEI AVRAFPAALE	
			MTAITLGGLL LKGIITLV	
ATCC 21253	pyc	51		100
NRRL B-11474	pyc		TGAATVAIYP REDRGSPHRS FASEAVRIGT EGSPVKAYLD IDEIIGAARK	
ATCC 21253	pyc	101		150
NRRL B-11474	pyc		VKADAIYPGY GFLSENAQLA RECAENGITF IGTPTEVLDL TGDKSRAVTA	
ATCC 21253	pyc	151		200
NRRL B-11474	pyc		AKKAGLPVLA ESTPSKNIDE IVKSAEGQTY PIFVKAVAGG GGRGMRFVAS	
			D S	
ATCC 21253	pyc	201		250
NRRL B-11474	pyc		PDELRLKATE ASREAEAAFG DGAVYVERAV INPQHIEVQI LGDHTGEVVH	
			S R	
ATCC 21253	pyc	251		300
NRRL B-11474	pyc		LYERDCSLQR RHQKVVEIAP AQHLDPELRD RICADAVKFC RSIGYQAGAT	
ATCC 21253	pyc	301		350
NRRL B-11474	pyc		VEFLVDEKGN HVFIEMNPRI QVEHTVTEEV TEVDLVKAQM RLAAGATLKE	
ATCC 21253	pyc	351		400
NRRL B-11474	pyc		LGLTQDKIKT HGAALQCRIT TEDPNNGFRP DTGTITAYRS PGAGVRLDG	
ATCC 21253	pyc	401		450
NRRL B-11474	pyc		AAQLGGEITA HFDSMLVKMT CRGSDFETAV ARAQRALAEF TVSGVATNIG	
ATCC 21253	pyc	451		500
NRRL B-11474	pyc		FLRALLREED FTSKRIATGF IADHPHLLQA PPADDEQGRI LDYLAGVTYN	
			G	
ATCC 21253	pyc	501		550
NRRL B-11474	pyc		KPHGVRPKDV AAPIDKLPNI KDLPLPRGSR DRLKQLGPAA FARDLREQDA	
ATCC 21253	pyc	551		600
NRRL B-11474	pyc		LAVTDTTFRD AHQSLLATRV RSPALKPAAE AVAKLTPELL SVEAWGGATY	
ATCC 21253	pyc	601		650
NRRL B-11474	pyc		DVAMRFLFED PWDRLDELRE AMPNVNIQML LRGRTVGYT PYPDSVCRAF	
ATCC 21253	pyc	651		700
NRRL B-11474	pyc		VKEAASSGVD IFRIFDALND VSQMRPAIDA VLETNTAVAE VAMAYSGDLS	
ATCC 21253	pyc	701		750
NRRL B-11474	pyc		DPNEKLYTLD YYLKMAEBEIV KSGAHILAIK DMAGLLRPAA VTKLVTALRR	
ATCC 21253	pyc	751		800
NRRL B-11474	pyc		EFDLVPHVHT HDTAGGQLAT YFAAAQAGAD AVDGASAPLS GTTSQPSLSA	

FIG. 2A